

Approaches for Successful Cross-curricular Integration of Literacy, Numeracy and Digital Competence

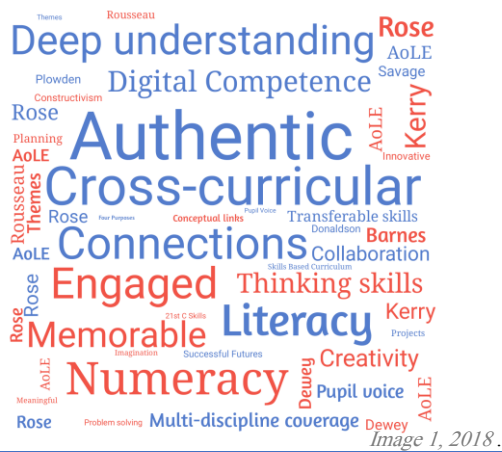


Image 1, 2018.

Why Cross-curricular?
Develops skills in: Communication, Problem Solving, Collaboration & Creativity. Essential 21st C skills
(World Economic Forum, 2016).
Combines creative thinking and disciplinary vigour
(Barnes, 2015).

Successful Futures

Cross-curriculum responsibilities

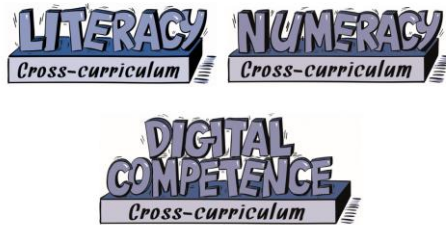


Image 2, 2015.

Thematic Approach (Barnes, 2015). Year 5

A thematic approach enables skilled and knowledgeable teachers to generate a body of work, which motivates children and allows them to develop skills across the curriculum (Savage, 2011; Kerry, 2015).



Image 3, 2015.

The Global Goals theme can facilitate a series of rich tasks, which incorporate different AOEs and provides scope for developing skills in literacy, numeracy and digital competence. Furthermore, it gives learners the opportunity to explore and discuss a range of emotional, social and well-being issues.

Activities and Learning Objectives

Activity 1. LO: We will work as a group to research and present a Global Goal of our choice.
Children will use ICT to access information on their chosen Global Goal.
Activity 2. LO: We will use technology to share our research digitally with the class.
Children will choose between email or file sharing on HWB. They will then consider the benefits and limitations of each.
Activity 3. LO: We will evaluate if we could survive off £1 a day for food. Using skills in numeracy and financial literacy, the children will compare online prices for different items. They will record their data in a table and use the information to plan a healthy menu within budget.

Multi-disciplinary Approach (Barnes, 2015). Year 5

A multi-disciplinary approach uses a common stimulus to develop learning and understanding in more than one subject. With this approach disciplines are introduced and taught separately (Barnes, 2015).

With Sports Day as the stimulus, children will work in groups and create a digital report of the day. During Sports Day, children will use a range of technology to take photos, record videos and time events. The following day, children will work in groups to develop their reports. The day will be arranged into three separate lessons; Maths & Numeracy, Language, Literacy & Communication and Science & Technology.



Image 4, 2017.

Activities and Learning Objectives

Activity 1. Mathematics and Numeracy. LO: Working in groups, we will analyse the results and events from Sports Day and decide how to display them in our report.
Activity 2. Language Literacy and Communication. LO We will create, edit and refine content for our report.
Activity 3. Science and Technology / Language Literacy and Communication. LO: We will use technology to develop a digital report that can be shared with others.
In this final session, the children will bring together the work from the first two activities and produce reports to be shared with parents or guardians. The children will choose between file sharing, email or online blog.

Coverage and Skills



explain information and ideas, exploring and using ways to be convincing; speak clearly, using formal language and projecting voice effectively to a large audience (LNF, 2014).



plan and track money and savings by keeping accurate records; realise that budgeting is important (LNF, 2014).



adjust keywords and search techniques to find relevant information; create groups and share work between them (DCF, 2016).



Assessment

The fluid nature of the tasks, requires formative teacher assessment through questioning and observation (Kerry, 2015). Learning can also be assessed through the childrens ability to apply previously learned skills.

Benefits and Limitations

Authentic. Engaging. Real-world connections (Nutbrown, 2011). **Pupil Engagement** (Estyn, 2009). **Transferable skills** (Dilek, 2008).
Theme may not stimulate all learners. Poor planning could result in nebulous links.

Coverage and Skills



write with a clear purpose, showing consideration for the reader, *e.g. by choosing appropriate vocabulary and presentational devices* (LNF, 2014).

select and construct appropriate charts, diagrams and graphs; represent data using: lists, tally charts, tables (LNF, 2014).

work with others to create an online collaborative project for a specific purpose, sharing and appropriately setting permissions for the other group members (DCF, 2016).

Assessment

Ongoing self and peer assessment as the report is being developed. Skill based assessment through teacher observation. Evidence assessment, through analysis of the reports produced by the children.

Benefits and Limitations

Focused on specific subject skills. Easier implementation for teachers (Rowley and Cooper, 2009). **Easier assessment** (Barnes, 2015)
Fewer opportunities for children to apply skills across subject boundaries.